


**MEMORANDUM**

Date: March 11, 2016

From:   
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David Kovach, P.G., Supervisor - Project Review Section  
DAK

To: DRBC Commissioners  
Steve Tambini, Executive Director

Subject: DRBC Staff Response to Comments and Recommendation re: Docket No. D-2015-017 CP-1 Pennsylvania Department of Conservation & Natural Resources Surface Water Withdrawal

**Summary:** In accordance with the Delaware River Basin Compact and regulations, staff of the Delaware River Basin Commission (“DRBC” or “Commission”) prepared a draft docket in response to an application submitted to the Commission on August 12, 2015 by the Pennsylvania Department of Conservation & Natural Resources (PADCNR) for the approval of an allocation of surface water and review of a surface water withdrawal project and inclusion in the Commission’s Comprehensive Plan. Specifically the application requested approval of a surface water withdrawal by PADCNR of up to 3.565 million gallons per month (mgm) to supplement water in the Pennsylvania Delaware Canal (Canal) from two existing surface water intakes on the Delaware River at Durham and Center Bridge. The water will be used to augment flow in the Delaware Canal downstream of the intake locations. The application also requested approval by PADCNR to implement a Temporary Pilot Program to utilize up to 3.0 million gallons per day (mgd) of water from the Point Pleasant Pump Station to establish and maintain flow in the Canal below the Point Pleasant Pump Station.

The Commission published a Notice of Application Receipt (NAR) concerning the application on the DRBC website on October 1, 2015. On the same date via U.S. Mail or email, the DRBC notified all parties on the Interested Parties List (“IPL”) for the project of the receipt of the application. The draft docket was announced for public comment and a public hearing in the Pennsylvania Bulletin on January 30, 2016 for the February 10, 2016 Commission Hearing. The hearing notice and draft docket were posted on the Commission’s website on January 26, 2016 for the February 10, 2015 Commission Hearing. Commission staff also sent copies of the hearing notice to individuals on the IPL.

At the February 10, 2016 public hearing, Commission staff presented the draft docket (Docket No. D-2015-017 CP-1). Oral comments were presented at the February 10, 2016 public hearing by Tracy Carluccio, Deputy Director, Delaware Riverkeeper Network (DRN), opposing inclusion in Draft Docket No. D-2016-017 CP-1 the request by the PADCNR to utilize up to 3.0 mgd of water withdrawn from the Delaware River through the Point Pleasant Pump Station for augmentation of the water flow in the Canal. The Commission also received a letter on February 11, 2016, signed by Ms. Carluccio and Ms. Maya K. van Rossum, the Delaware Riverkeeper that presented their objections to the inclusion of the Pilot Project approval in the docket. The public comment period closed at 5:00 p.m. February 12, 2015.

A summary of the comments provided, staff's responses to those comments and staff's recommendation are provided below.

### **Response to Comments**

**Comment 1.** In support of their objections DRN commented that there were no calculations included in the record that justify the PADCNR request of up to 3.0 mgd and that without this data there is no certainty that the Section of the Canal will be able to accept and hold that much water during the initial filling and as maintenance flow.

**Response:** The purpose of the Temporary Pilot Program is to determine if pumping water from the Point Pleasant Pump Station is a feasible alternative to supplement water into the Canal. While the application did not include any calculations from the PADCNR regarding the 3.0 mgd of water request to augment water flow in the Canal, the Commission staff had several conversations with the PADCNR and the Forest Park Water Authority (FPWA) both before and after the application concerning the Temporary Pilot Program and the water request. In addition, the Commission staff calculated an approximate amount of water required to fill the Canal approximately 4.0 feet deep from the Point Pleasant Pump Station to New Hope (approximately 9 River Miles). The Commission determined that approximately 35.5 million gallons are required to fulfill the PADCNR's request to fill the Canal 4.0 feet deep, this will require approximately 12 days at the rate of 3.0 mgd. Based on these calculations Commission staff developed the provisions in the draft docket.

In response to the comments presented at the hearing and the Commission staff discussions after the hearing, PADCNR has provided calculations and additional information regarding the Canal and the pilot project. The PACNR has advised Commission staff that repairs are completed to the Canal above the point of discharge to the Canal from the Pt. Pleasant Pump Station, and the PADCNR are presently adding water to the Canal from sources north of the Point Pleasant Pump Station. Therefore, water from the Point Pleasant Pump Station will be used to supplement the Canal flow as opposed to being the main source of flow to the Canal. Given the Commission staff's calculations, and the additional information from this information from the PADCNR, Commission staff continue to recommend the approval of the requested flow and the temporary pilot program.

**Comment 2.** DRN raises concerns about the stability and safety of the Canal, commenting that no information was provided regarding investigation regarding the Canal condition before the proposed discharge. DKNR comments that given the age of the Canal, the damage that the Canal has sustained by multiple hurricanes/storms in recent years, the slow repairs to the Canal, and history of leaks and ruptures, filling the Canal without a comprehensive stability analysis study presents a potential hazard and questionable use of water and energy to sustain the Canal, even if there are no failures. They raise concerns that overfilling, leaking, or failure of the Canal infrastructure will result in the flooding to river business, and homes, and threatening other infrastructure of River Road and other roads, bridges, etc.

**Response:** PADCNR is responsible to conduct repairs and maintenance on the canal as required. While PADCNR has indicated that it has not conducted any testing of the Canal section from the Point Pleasant Pump Station (Plumstead Township, PA) to New Hope, PA, they did indicate that they have conducted a visual inspection and expect to continue to conduct inspections during the refilling of the Canal. PADCNR has also advised Commission staff that repairs to the section of the Canal above the point of proposed discharge from the Point Pleasant Pump Station are completed and that water is being directed into this section of the Canal. PADCNR has also confirmed that they expect to only maintain a water level of 4 feet in the Canal. Therefore the water supplied by the Point Pleasant Pump Station is expected to be used primarily for water level maintenance in the Canal. As noted in the docket and in the comments from the DRN, the Canal's main source of water is the Easton Inlet and is supplemented by the pumps located in the Delaware River at Durham and Center Bridge. The pumps at Durham and Center Bridge are necessary to help maintain the water levels in the Canal.

PADCNR still requests approval of the temporary pilot program, since it is interested in determining if it is feasible to utilize water from the Point Pleasant Pump Station to maintain water levels in this section of the Canal. As noted on page 2 of this docket PADCNR is also investigating the possibility of developing additional pumping capability at the Golden Pheasant Inn Restaurant in Erwinna, Bucks County, PA. PADCNR is aware that prior to design and construction of the Golden Pheasant Intake, the docket holder is required to apply to the Commission for its approval.

Commission staff have modified the draft docket to reflect the information provided by the PADCNR and to respond to some of the concerns raised by the DRN. Docket Condition II. e. has been modified to require that prior to the initiation of the Temporary Pilot Program the PADCNR shall prepare and submit to the Executive Director and PADEP:

“II.e.i. a written report that describes the physical condition of the Canal, with particular focus on the Canal stability, potential impacts of the Temporary Pilot Program, and the identification of potential for major leaks, ruptures or weak spots below Point Pleasant Pump Station to New Hope, PA. The PADNRC will demonstrate that it has remediated any such potential areas prior to the initiation of the Temporary Pilot Program.”

**Comment 3.** DRN objects to the use of water withdrawal from the Point Pleasant Pump Station and requests a separate docket be prepared for this pilot project. DRN indicates that the application for the separate docket should:

- verify there will be no erosion at the discharge point.
- consider the environmental impacts from the river and the eddy where the Point Pleasant intake is located.
- determine the ability of the Canal to retain the water through an engineering analysis of its stability
- not allow the project to “piggy-back” on the environmental analysis performed in the 1980’s when the Point Pleasant Pump Station was approved.

**Response:** This docket is for the approval of two existing PADCNR supplemental water sources to the Canal in addition to the temporary pilot project. If the PADCNR determines it wants this supplemental source on a permanent basis, it will be required to submit an application with the supporting information. It is more appropriate and prudent to consolidate related Canal operations into one docket. However, in addition to the PADCNR application, the FPWA will be required to apply to the Commission for a modification to its existing Point Pleasant Pump Station Docket No D-1965-076 CP-8 to modify its approved service area in the existing docket and if necessary, for approval of any increase in its current allocation.

- a. **Verify that there is no erosion at discharge point:** No erosion is expected at the discharge into the Canal. FPWA will provide the water through an existing fire plug and a fire hose or piping located on their property to an existing storm water drain that discharges to a drainage swale to the Canal. Commission staff visited the site with FPWA staff site prior to the development of the draft docket. The existing drainage swale has stone to prevent erosion, FPWA will add additional stone if it is determined to be necessary.
- b. **Consider the environmental impacts from the river and the eddy where the Point Pleasant intake is located:** The docket limits the amount of water from the Point Pleasant Pump Station to up to 3.0 mgd. This water will be provided within the existing water supply allocation provided in their current DRBC Docket No D-1965-076 CP-8. Since no additional allocation is provided there will be no additional impacts that was not considered during the environmental analysis for the approval of Docket No D-1965-076 CP-8.
- c. **Determine the ability of the Canal to retain the water through an engineering analysis of its stability:** This comment was addressed in the response to Comment 2 above.
- d. **Do not allow the project to “piggy-back” on the environmental analysis performed in the 1980’s when the Point Pleasant Pump Station:** As indicate above, both PADCNR and FPWA will be required to apply for docket amendments if there is a request to continue the withdrawal of water from the Pleasant Pump Station on a permanent basis. If FPWA seeks an increase of its allocation it will need to submit an analysis of the impacts of the increase at the withdrawal point.

#### **Modification to the Draft Docket and Commission Staff Recommendation**

Commission staff have reviewed the oral and written comments submitted on the draft docket, prepared the response to those comments as noted above, and made several modifications to the docket in response to those comments and information provided by PADNCR. Most of the changes were wording changes. The major change was to docket condition No. II.e. in the Decision section. The revised condition No. II.e. is provided below. Commission staff recommend that you approve Docket No. as revised (Copy Attached).

Revised Condition II.e.

e. This docket also approves the implementation of a Temporary Pilot Program to utilize up to 3.0 mgd of water from the Point Pleasant Pump Station to establish and maintain flow in the Canal below the Point Pleasant Pump Station. The program is required to demonstrate the cost and feasibility of transferring up to 3.0 mgd of water from the Point Pleasant Pump Station to fill and/or maintain a water level of 4 feet in the Canal between the pump station (Plumstead Township, Bucks County) and New Hope, PA. The docket holder shall conduct the Temporary Pilot Program as described in a letter submitted by the docket holder with the application dated January 6, 2016 and in accordance with the following conditions:

1. Prior to the initiation of the Temporary Pilot Program the PADCRN shall prepare and submit to the Executive Director and PADEP:
  - a. A written report that describes the physical condition of the Canal, with particular focus on the Canal stability, potential impacts of the Temporary Pilot Program, and the identification of potential for major leaks, ruptures or weak spots below Point Pleasant Pump Station to New Hope, PA. The DNRC will demonstrate that it has remediated any such potential areas prior to the initiation of the Temporary Pilot Program.
  - b. Documentation that it has contacted the residents and the elected officials along the Canal, in writing, advising them of the Temporary Pilot Program and responded to questions or concerns the public may have regarding the Temporary Pilot Program. The written results of this program will be provided to the Executive Director and the PADEP.
2. Prior to the initiation of the Temporary Pilot Program, the FPWA shall have received the written approval from the Executive Director to provide up to 3 mgd of water from the Point Pleasant Pump Station with no increase in the allocation approved in Docket No. D-1965-076 CP-8.
3. Upon the PADCRN's and the FPWA'S receipt of the written approval from the Executive Director to initiate the Temporary Pilot Program up to 3.0 mgd of water from the Point Pleasant Pump Station may be discharged into the Canal until the water level in the Canal 4 feet deep. Subject to the 3.0 mgd limitation, additional water may then be discharged into the Canal as necessary to maintain the water in the Canal. The Temporary Pilot Program is approved for up to six (6) months or until October 31, 2016.
4. During the Temporary Pilot Program the PADCRN shall:
  - a. Conduct a Canal monitoring program including daily visual inspections during the Canal filling. The visual inspection may be reduced to weekly and then monthly inspections after the water level in the Canal of 4 feet is achieved upon written approval from the Executive Director.
  - b. Continue to conduct the continuous outreach program and as necessary and to advise residents, businesses emergency responders, and elected officials along the Canal, and the FPWA, the Executive Director, PADEP of any potential or actual

instability, major leaks, or blow outs, that are discovered as a result of the Canal monitoring program.

c. Direct the FPWA to immediately cease the discharge to the Canal when DCRN becomes aware of any potential or actual instability, major leaks, or blow outs.

5. Required Reports – The docket holder shall submit to the Executive Director and PADEP a report within (3) months after initiation of Temporary Pilot Program evaluating the success of the program and the potential feasibility for a long term program. The report shall include whether the FPWA will continue to supplement water into the Canal from the Point Pleasant Pump Station and whether or not an increase in the allocation to Point Pleasant Pump Station Docket No. D-1965-076 CP-8 for the long term Canal supplement program is required. The report shall also discuss how the long-term program will be implemented, the potential environmental impact of an increased withdrawal from the Point Pleasant Pump Station at the intakes in the Delaware River, the method and stability of the discharge to the Canal and the projected construction, operation and maintenance cost and the source of the funds.

6. The Executive Director may extend the Temporary Pilot Program up to an additional six (6) months if it is determined that the additional time is necessary to evaluate the program fully.

7. Implementation of the long term program will require the submission to and the approval by the Commission of an application for the modification of this docket and of an application from the FPWA for the modification of the Point Pleasant Pump Station Docket No. D-1965-076 CP-8, if it will continue to be the source for the water to supplement the Canal.